

A NEW SPECIES OF APHIOCHÆTA (DIPTERA,
PHORIDÆ) FROM NEW ENGLAND.

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Aphiochæta johnsoni sp. nov.

Length, 2.0 mm. Fore tarsi thickened; mesopleura bristly above, without any macrochaeta, two scutellar bristles. Thorax brownish yellow; head black; abdomen black or piceous, the first three segments narrowly margined with whitish; hypopygium fuscous, its lamella yellow; legs luteous or dull yellow. Front slightly broader than high; ocellar tubercle large, median frontal groove present, proclinate bristles four, the lower pair much more delicate than the upper pair and almost as far apart; inner bristle of lower reclinate row on the anterior margin of the front midway between the upper proclinate one and the eye-margin, outer bristle close to the eye-margin and well above the margin of the front; middle row of four equidistant bristles forming a row that is bent down medially. Antennæ not enlarged, dark fuscous, arista as long as the head height, strongly pubescent. Palpi distinctly enlarged, but less so than in *A. projecta*, with several short bristles below and a pair at tip almost as long as the vertical thickness of the palpus; cheeks each with two strong bristles; postocular cilia strong. Propleura above the coxa with stout bristles and with weaker ones on its upper half. Mesonotum subshining, hairy, with a number of bristles along the sides and posterior edge; scutellum with two bristles and two hairs; mesopleura above with a patch of small bristles of equal size. Abdomen opaque, with scattered bristly hairs, especially conspicuous near the sides of the basal segments and on the disc of the fourth and following segments. Hypopygium and its median lamella also bristly. Legs stout; anterior tarsi thickened, longer than their tibiæ; middle tibiæ with very weak cilia; those of hind tibiæ a trifle stronger, but not conspicuous; hind tibiæ with four short transverse rows of minute bristles inwardly at tip; hind tibiæ not ciliate below, with only the usual short hairs. Wings large, distinctly tinged with brownish; costal vein extending to distinctly beyond the middle of the wing; costal cilia short and closely placed; first section of

costa slightly more than twice as long as the second; third three-fourths as long as the second; second vein ascending rather sharply to the costa; fourth vein curved at the base, but nearly straight beyond, fifth and sixth sinuous; seventh distinct, long. Halteres pale yellow.

One specimen from Kent, Me., August 19, collected by Mr. C. W. Johnson. Type in the collection of the Boston Society of Natural History.

This species is related to *projecta* Becker which also occurs generally through New England (Boston, Mass.; Brookline, Mass.; Hanover, N. H.), but differs by having the lower pair of proclinate bristles weaker and the palpi less noticeably enlarged in the male as well as by the absence of a fringe of hairs on the posterior femora and the presence of only two scutellar bristles. It is also much like the European *A. hortensis* Wood, but the hypopygium is bristly.

THE PANURGINE BEES OF THE GENERA HESPERAPIS, ZACESTA AND PANURGOMIA.

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The genus *Hesperapis* Ckll., 1898, was based on *H. elegantula* Ckll. from New Mexico. At the present time seven species are assigned to it, the range of the genus being from New Mexico to Southern California. The following table separates the known forms:

Thorax above with moss-like ochraceous hair; abdomen dull ferruginous	<i>elegantula</i> Ckll.
Thorax with ordinary pubescence; abdomen not red	1
1. Area of metathorax dull, or only the apical part shining	2
Area of metathorax polished and shining	3
2. Mesothorax strongly and closely punctured, somewhat shining; male about 11.5 mm. long	<i>eumorpha</i> (Ckll.)
Mesothorax and scutellum shining, polished, finely punctured; male a little over 6 mm. long	<i>nitidula</i> Ckll.
Mesothorax and scutellum dull, not evidently punctured	<i>semirudis</i> Ckll.